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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/658,280 | 09/08/2000 | Hironobu kageyama | 1341.1061/JDH | 3557 |

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EXAMINER

RIOS CUEVAS, ROBERTO JOSE

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/658,280

Applicant(s)

KAGEYAMA, HIRONOBU

Examin r

Roberto J Rios

Art Unit

2836

-- The MAILING DATE of this c mmunication appears on the c ver sheet with the c rresp ndence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 22 November 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Linde (US patent 5,745,670) and Kim* (US patent 5,886,424).

*Reference is provided to further support the Examiner's official notice traversed by applicant.

As per claim 2, AAPA (Figure 5) teaches all the limitations except the control unit being also powered by the control power supply unit of another power supply unit. However, Linde teaches a power supply device comprising a plurality of power supply units (12, 12'...) parallel connected, wherein each power supply unit comprises a control unit (30) receiving power from an internal supply (12) and from the internal supplies of other power supply units through a power bus (Figure 3, col. 5, line 13).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of AAPA with the teachings of Linde such that the control unit is also powered by the control power supply unit of another power supply unit for the purpose of enabling the control units to function independent of the operational condition of the internal supply.

Moreover, Linde teaches the control unit receiving inputted controlling voltage supply (power line 24) but does not specifically disclose a converting unit for outputting

said received voltage to said control unit. However, the Examiner takes official notice that Linde's control unit inherently comprises a voltage converting unit that receives the voltage from line (24) and supplies a constant controlling voltage supply (DC) to the logic controlling gates (Figure 3). It is well known in the art that logic-controlling gates such as ANDs, OpAmps and Inverters require a constant and particular operating voltage (V_{cc}). In most electronic devices a voltage converter receives at least one input voltage and provides the required operating voltages. *Kim teaches a power supply unit, wherein a voltage converter (24) is inserted in an upstream side of a logic control circuit (25) for providing a plurality of constant operating voltages (col. 5, lines 53-61; col. 4, lines 17-22).

As per claim 3, the combination of AAPA (Figure 5) in view of Linde teaches providing rush current prevention circuits (14) and (16) in the downstream side of the main power supply unit and the control power supply unit respectively for preventing a rush current from flowing into the power units. Furthermore, AAPA (Figure 6) teaches that rush current prevention circuit (42) could be provided upstream the control unit for preventing a rush current from flowing into the control unit. Thus, it would have been obvious to one of ordinary skill in the art to provide all of said rush current prevention circuits for the purpose of completely isolating the power supply units from inrush currents that could damage the power supply units.

Response to Arguments

3. Applicant's arguments filed 11/22/2002 have been fully considered but they are not persuasive.

Applicant argues that Linde's control unit does not inherently comprise a voltage-converting unit that receives the voltage from line (24) and supplies a constant controlling voltage supply the logic controlling gates. It is well known in the art that logic-controlling gates such as ANDs, OpAmps and Inverters require a constant and particular operating voltage (V_{cc}). In most electronic devices a voltage converter receives at least one input voltage and provides the required operating voltages. A prior art reference has been provided to further support the Examiner's position as traversed by the applicant.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, Linde teaches the control unit (30) receiving power from power supply (12) through rush current prevention unit (14) and power line (24). In addition, Linde teaches said control unit (30) receiving power through power line (24) from other power supplies (12', 12''...) that are parallel coupled through power bus (44). Moreover, Linde discloses that said configuration is provided such that the control unit (30) will be able to function independent of the operational condition of the local power supply (col. 5, line). It is important to point out that Linde's local power supply (12) serves as the

main power supply unit for the load and the control power supply unit for the control unit as shown in Figure 3.

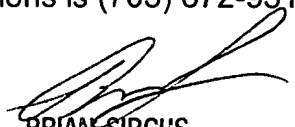
4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication with PTO

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rios whose telephone number is (703) 306-5518. In the event that Examiner Rios cannot be reached, his supervisor, Brian Sircus may be contacted at (703) 308-3119. The fax number for Before-Final communications is (703) 872-9318, for After-Final communications is (703) 872-9319, and for Customer Service is (703) 872-9317.

Roberto J. Rios
Patent Examiner


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